

2	1/2" one 10'-8" 24"
	2
	1/2" two 12'-7" 24"
	3
	5/8" one 15'-5" 16"
3	5/8" one 13'-8" 24"
3	5/8" two 15'-5" 24"
*The use of these tables shall be limited to applications involving simply supported conditions. Where studs are braced at or below maximum stud height ( by suspended ceiling or separate bracing), the overall height may be increased by 50%.	
4.	Metal runners shall correspond in size and gauge to metal studs. Metal runners shall be continuous and attachment shall be at 24" on center unless noted otherwise.
5.	Metal furring shall be spaced at 24" on center unless noted otherwise.
C. Fire Rated Gypsum Board Partitions	
1.	Fire rated partitions shall conform to UL design number indicated. Refer to UL Fire Resistance Directory - Volume I (latest edition) for additional information.
2.	All Mechanical, Electrical, and Plumbing penetrations in fire rated partitions shall be sealed at their perimeter with approved fire rated sealer.
D. Sound Rated Partitions	
1.	Sound rated partitions shall conform to ASTM E497, Standard Practice for Installing Sound-Isolating Lightweight Partitions.
2.	All Mechanical, Electrical, and Plumbing penetrations in sound rated partitions shall be sealed at their perimeter with approved acoustical sealer.
E. Gypsum Board Finish Notes	
1.	Gypsum board shall be installed and finished to within 1/4" of floor slab.
2.	All Gypsum board panel joints, joints to existing construction, edge trim, corner beads, and pre-formed reveals shall be tapped, bedded in joint compound, and sanded smooth with no visible joints. Provide proper backing for all reveals as recommended by manufacturer.
3.	Outside corners of gypsum board shall have metal corner beads (screwed type), unless noted otherwise.
4.	Metal edge trim shall match USG #200B series and shall be in sizes corresponding to gypsum board thickness.
5.	Alignment of door heads and other critical horizontal elements shall be maintained at a constant level relative to the ceiling plane, and shall not follow variations in floor plane.
6.	Partition types above door are to be same as the adjacent partitions unless noted otherwise.
7.	Align face of partitions with face of adjacent column unless noted otherwise.
8.	Provide additional studs as required to achieve outlet groupings. Coordinate with engineering drawings.
F. Blocking	
1.	Wood blocking shall be fire retardant treated (FRT). Install wood blocking as required in partitions at wall hung shelving, cabinets, artwork, toilet partitions and accessories, etc. Verify blocking requirements with millwork subcontractor and review with the Architect for acceptance prior to installation.
09300 _TILE	
A. Submittals	
1.	Tile samples indicating all sizes, shapes, and colors.
2.	Grout color
B. Installation method	
1.	Floor surfaces: Tile Council of America installation # F113-96, dry-set mortar or latex-Portland cement mortar.
2.	Vertical surfaces: Tile Council of America installation # W242-96, thin set organic adhesive.
C. Prepare the existing base building slab prior to installation of tile. All surfaces shall be sealed, sized or properly prepared per manufacturer's specifications and recommendations. The Contractor shall flash patch all uneven floor slab surfaces in order to provide a flat, smooth and continuous floor surface.	
D. Install white marble threshold at doors that define transitions between ceramic tile and other floor finishes. Threshold shall be shaped to meet ADA requirements.	
09510 _ACOUSTICAL CEILINGS	
A. Submittals	
1.	Submit a minimum of three samples of the following: a. Acoustical ceiling panels: 6' x 6' minimum b. Suspension system components: 12" in length
B. Quality Assurance	
1.	To the greatest extent possible, materials, including exposed wall moldings, suspensions systems, and accessories, shall be products of a single manufacturer or items standard with manufacturer of acoustical ceiling panel units.
C. Materials	
1.	Suspension system: ASTM C635 a. Grid Components: i.) Exposed Tee: Die cut and interlocking ii.) Wall Moldings: Hemmed angle iii.) Face dimension: 15/16" iv.) Finish: Baked polyester paint v.) Color: 1.) White at locations with acoustical ceiling panels 2.) Black at locations with open grid b. Acceptable Products: i.) Armstrong - Prelude XL Exposed Tee System ii.) USG Interiors - DX Grid System
2.	Acoustical Ceiling Panels: ASTM E1264 a. Size: 24" x 24" b. Thickness: 3/4" c. Edge: Beveled regular lay-in d. Color: White e. Acceptable Products: i.) Armstrong - Angled Tegular Cirrus ii.) USG Interiors - Eclipse Tapered
D. Installation	
1.	Grid System: a. Install grid system in compliance with ASTM C636, manufacturer's instructions, and as supplemented in this section. b. Install grid system in a true, even plane and in straight courses as indicated on Drawings and accepted shop drawings. c. Coordinate and fit ceiling components to grilles, lighting fixtures, and other related items. In determining location and spacing of hangers and primary runners, take into consideration weight of grilles, light fixtures, etc., that are to be installed in conjunction with acoustical ceilings. d. Provide stabilizer bars, clips, splices, and edge moldings needed for a complete installation. e. Hang grid system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members. f. Where ducts or other equipment prevent regular spacing of hangers, reinforce nearest affected hangers and related carrying channels to span extra distance. g. Do not support components on main runners or cross runners if weight causes total dead load to exceed maximum deflection limitations. Support fixture loads by supplementary hangers located within 6" (150 mm) of each corner, or support components independently. h. Do not eccentrically load system, or produce rotation of runners.
2.	Moldings and Trim a. Install wall moldings at intersection of suspended ceiling and vertical surfaces, using longest practical lengths. Provide moldings at junctions with other interruptions and as needed to cover edges of acoustical ceiling panels. b. Attach moldings and trims with screws spaced not more than 16" (400 mm) on center and within 3" (75 mm) of ends of each piece being installed. c. Moldings and trim shall be level with suspension system and within tolerances specified for suspension system. d. Miter corners and align butt joints where wall moldings intersect to form tight, hairline joints. e. Face riveting of moldings and trim shall not be acceptable.
3.	Tolerances a. Deflection of grid components shall not exceed 1/360 of span. b. Variation from Flat and Level Surface: 1/8" (3 mm) in 10 feet (3000 mm) maximum. c. Variation from Plumb of Grid Members: 2 degrees maximum, caused by eccentric loads.
E. Adjusting and Cleaning	
1.	Follow grid system manufacturer's recommendations for methods and materials to clean and touch-up exposed components.
2.	Replace components which are discolored or damaged in any way, in a manner which results in grid system showing no evidence of replacement work.
09650 _RESILIENT FLOORING	
A. Submittals:	
1.	Vinyl composition tile sample.
2.	Black resilient transition/reducer strip (provided at changes in flooring).
3.	Vinyl cove and straight base.

B. Prepare the existing, base building slab prior to installation of the scheduled flooring. All surfaces shall be sealed, sized or properly prepared per manufacturer's specifications and recommendations. The Contractor shall flash patch all uneven floor slab surfaces in order to provide a flat, smooth and continuous floor surface.	
C. VCT shall be laid in straight grid (not basket weave) direction. Refer to drawings for color patterns and direction.	
D. 2 1/2" cove base shall be used at all VCT locations. 2 1/2" straight base shall be used at carpet locations unless noted otherwise. The Contractor shall use inside and outside corners and end stops for all areas specified. Use roll goods only. No seam shall occur within 6" of an outside corner.	
E. Install black resilient transition/reducer strip between VCT and other floor finishes.	
09680 _CARPET	
A. Submittals	
1.	Shop Drawings: a. Clearly indicate locations of seams, methods of joining seams, direction of carpet, type of adhesive to be used, method of integrating resilient trim with carpet, and installation procedures.
2.	Samples: a. Submit a minimum of three samples of each carpet to be used, sufficiently sized to clearly indicate construction, but not less than 12" x 12". b. Submit samples, 12" long, of moldings and trims.
B. Project Conditions	
1.	Field measurements: a. Verify dimensions in field that may affect installation. Installer shall be responsible for accuracy of measurements of total yardage, individual floor yardage requirements, dye lot yardage placement, extra yardage for pattern matching, and roll length requirements.
2.	Surface Preparation: a. Clean floors of dust, dirt, solvents, oil, grease, paint, plaster, and other substances which could be detrimental to proper performance of adhesive and carpet. Allow floors to thoroughly dry. b. Remove sub-floor ridges and bumps. Fill low spots, cracks, joints, holes, and other defects, using subfloor filler compatible with carpet and adhesives. c. Use an approved cementitious filler to patch cracks, small holes, and for leveling. Do not use gypsum-based leveling and patching materials.
C. Installation	
1.	General Requirements: a. Check matching of carpet before installing and ensure there is no visible variation between dye lots. b. Do not place heavy objects such as furniture on carpeted surfaces for a minimum of 24 hours or until adhesive has set. c. Entire carpet installation is to be laid tight and flat to subfloor, well fastened at edges, and present a uniform pleasing appearance. Ensure a monolithic color, pattern and texture match within area.
2.	Layout: a. Lay carpet on floors with pile in same direction of anticipated traffic. Do not change run of pile in one room. b. Fit carpet neatly and snugly around projections through floor and to walls and other vertical surfaces with no gaps.
3.	Transitional Moldings and Trim: a. Install resilient trim where carpet terminates at other floor coverings, or at carpet termination that does not abut a vertical surface. Use full length pieces only. Butt tight to vertical surfaces. Where splicing cannot be avoided, butt ends tight and flush.
D. Protection	
1.	If needed to protect finished installation from dirt or paint, or if additional work is to be done after installation, cover carpet with a non-staining building material paper. Plastic sheeting shall not be used over carpet installation.
2.	Protect installation from rolling traffic by using sheets of hardboard or plywood in affected areas.
3.	Traffic over adhesive applications shall be restricted for a minimum of 24 to 48 hours to allow proper adhesive cure.
4.	Temperature of carpeted areas shall not fall below 50 degrees F, regardless of age of installation.

09715 \_STRETCHED FABRIC PANEL SYSTEM

SUBMITTALS	
A. Product Data:	
1.	Submit manufacturer's literature describing products to be provided.
B. Shop Drawings:	
1.	Submit scaled shop drawings showing arrangement of panel joints, thickness, locations of seams, methods of joining seams, direction of fabric, and other similar detailed information necessary to fully describe installation.
C. Samples:	
1.	Submit a minimum of 3 samples as follows: a. Each type mounting channels b. Each type fabric facing c. Each type core material
2.	Sample Size: 12" x 12" or 12" in length as appropriate to material
D. Quality Assurance Submittals:	
1.	Test Reports: a. Submit test reports for stretched fabric panel system prepared by an independent testing laboratory indicating full compliance with both acoustical and fire resistance performance requirements. i) Fire ratings shall be for a complete assembly, including perimeter and intermediate longitudinal or butt joint framing extrusions, core material, and fabric covering. b. Submit test reports for fabric covering prepared by an independent testing laboratory indicating compliance with specified fire resistance performance requirements.

PROJECT CONDITIONS

A. Environmental Requirements:	
1.	Maintain ambient temperature and humidity within spaces to receive stretched fabric panel system at levels indicated for final acceptance. Levels shall be maintained continuously from at least 48 hours prior installation until space is turned over to Owner.

MATERIALS

A. Stretched Fabric Panel System:	
1.	Stretched fabric panel system shall consist of continuous perimeter and mid-wall rigid polymer extrusions applied directly to substrate. Hinged type extrusions shall not be acceptable. Prefabricated panels do not satisfy intent of this specification. a. Panel Size: As indicated on Drawings b. Edge Configuration: Square c. Mid-Wall Configuration: Butt joint
2.	Acceptable Product: Novawall
B. Core Materials:	
1.	Acoustical Core: Semi-rigid fiberglass board a. Density: 6 pcf. b. Thickness: 1" [2"] [1/2"] nominal c. Noise Reduction Coefficient; determined by ASTM C423: 0.65 [0.95] [0.55] minimum
2.	Tackable Core: Mineral fiberboard a. Density: 24 pcf.; ±2 pcf. b. Thickness: 1/2"
3.	Fire Resistance: ASTM E84, NFPA 255, or UL 723 a. Complete panel assembly, including framework, mid-wall support, mounting devices, core, and fabric shall have a Class A rating. i) Flame Spread: 25 or less ii) Smoke Developed: Not to exceed 450
C. Fabric Facing:	
1.	Flammability: Class A; ASTM E84, NFPA 255, or UL 723
2.	Selections: Refer to Schedule of Finishes

INSTALLATION

A. Stretched Fabric Panel System:	
1.	Install system in strict compliance with shop drawings and manufacturer's instructions.
2.	Visible surfaces shall be fully covered and free from wrinkles, sags, blisters, and foreign matter.
3.	Core materials shall be installed in a continuous manner, flush and level with framework. Core materials shall not telescope through face of fabric.
4.	Panel joints shall be tight, straight, true, plumb, and in proper relation to building lines without ripples, waviness, and "hourglass" effects.
5.	Facing fabric shall be stretched over system, leaving fabric floating above core surface. Fabric facing application shall not utilize adhesives, nails, tacks, screws, or tapes.
6.	Install fabric with warp and weft threads plumb, level, and true. Patterns, textures, and grain of fabric shall be aligned and matched at seams. Throughout entire seam, join wall panels without distortion to geometry of fabric or pattern.
7.	Seaming of fabric shall not be allowed.

8.	System shall allow for removal and replacement of fabric facing from individual panels. Removal of fabric shall provide access to surface behind fabric, without dismantling, removal, or replacement of mounting extrusions.
9.	Provide FRT wood blocking behind fabric and flush with core material as required for attachments or artwork and as indicated on drawings.
09900 _PAINTING	
A. Submittals	
1.	Provide a minimum of three 12" x 12" samples for each color and each finish indicated in the finish schedule.
B. Products	
1.	See finish schedule for manufacturers, colors and finishes.
C. Execution	
1.	General: a. Prior to paint application, the Contractor shall schedule a review of final paint color locations with the Architect in the field. b. See finish plan and interior elevations for specific locations of paint colors and finishes. c. Where parts of two different types or colors abut, the seam shall be on an inside corner only. d. Final coat of paint shall be roll applied at all GWB surfaces.
2.	Preparation: a. Remove blistered, peeling and scaling paint or chalk deposits to sound substrates. b. Completely remove sealants or caulking. c. Dull glossy surfaces. d. At metal surfaces, remove rust, oil, grease and other contaminants harmful to painting. Sand clean and spot prime. e. At GWB surfaces, repair surface defects with joint compound, fill flush and sand smooth. Clean surfaces of dust, grease and dirt. f. At wood surfaces, sand smooth and remove dust. Countersink nails and fill nail holes, cracks and open joints with putty or wood filler.
3.	Application (unless noted otherwise): a. At GWB surfaces: One (1) primer coat: Vinyl acrylic primer sealer. Two (2) finish coats: Vinyl acrylic latex; eggshell finish @ walls, flat @ ceilings. b. At interior wood surfaces to be painted: One (1) primer coat: Alkyd enamel underbody. Two (2) finish coats: Vinyl acrylic latex semi-gloss enamel. c. At interior metal surfaces to be painted: One (1) primer coat: Rust-inhibiting alkyd primer. Two (2) finish coats: Alkyd gloss enamel.
4.	Clean-up: a. The Contractor shall provide one final touch-up of paint surfaces after the Owner has moved into the space.

DIVISION 12 - FURNISHINGS

12490 - WINDOW SHADES

SUBMITTALS

A. Product Data:	
1.	Submit manufacturer's literature describing products to be provided.
B. Samples:	
1.	Submit minimum of 3 samples of each shade fabric. Sample Size: 6" x 6"

MANUAL CHAIN SHADES

A. Acceptable Manufacturers:	
1.	Direct Path Corp. - Nysan Shading Systems
2.	MechoShade Systems Inc.
B. Manual Chain Operator: Unitized premoulded construction	
1.	Mounting Brackets: L shaped steel a. Size: 2 7/8" x 3"
2.	Drive Chain: #10 stainless steel a. Strength: 90 lbs. test
C. Shade Tube Assembly: Extruded aluminum tube	
1.	Size: 1 3/8" diameter
2.	Finish: Anodized; clear
D. Aluminum Fascia: Extruded aluminum; 6063-T5 alloy	
1.	Size: 3" x 2" nominal
2.	Thickness: 1/16"
3.	Finish: Match adjacent window framing
F. Shade Fabric: PVC coated fiberglass fabric	
1.	Selections: Refer to Schedule of Finishes
2.	Fire Performance Characteristics: NFPA 701; pass
D. Manual Chain Operator:	
1.	Unitized premoulded construction, shipped completely assembled from factory requiring only a few on-site adjustments to install.
2.	Chain operator assembly shall be set for travel length of shade, on-site without disassembly of hardware.
3.	Drive chain shall be #10 stainless steel, strength for 41 kg (90 lb.) test; Manufactured with precise automatic braking system, to eliminate breakage of chain under normal usage.
4.	Shade shall not be operable by pulling hem bar downward.

FABRICATION

A. General Requirements:	
1.	Shading system components shall be manufactured and assembled to allow for custom installation techniques to suit Project conditions.
2.	Finished assemblies shall be, square, true to size and free from distortion, twist, or other defects that could effect their strength, operation or appearance.
3.	Fabric shall be colorfast , and retain its shape, and shall not be affected by moisture or heat. Cut fabric to eliminate glare and reverberation from shining surfaces maintaining exterior view. Top of fabric shall be retained in recessed spline of shade roller; bottom of fabric shall be retained in extruded hem bar.
4.	Fasteners shall be non-corrosive type, suitable for intended application.
B. Aluminum Fascia:	
1.	Fascias shall be custom designed closures to fit onto premoulded end mounting brackets without exposed fasteners.
D. Shade Fabric:	
1.	Top of fabric shall be retained in recessed spline of shade roller; bottom of fabric shall be retained in extruded hem bar, without exposed fasteners.
E. Hem Bar:	
1.	Bar shall be shaped steel profile, engineered to weight requirements, insert in welded hem bar pocket and closed ends, to maintain bottom of shade fabric straight and flat.

INSTALLATION

A. General requirements:	
1.	Make accurate measurements of site conditions before fabrication. Check layout of glazing framing sections, spans, and loading capabilities.
2.	Shades shall be install by manufacturers' skilled installers in strict compliance with manufacturers' recommendations.
3.	Shades shall be installed plumb, square, and rigidly coupled, adequately anchored. Maintain uniform clearances, accurate alignment levels and parallel installation with window plane.
4.	Install tube with shade fabric already attached. Shade fabric shall be pre-measured and manufactured off-site.
5.	Adjust shades and operating components as needed to ensure smooth and trouble free operation without binding. Fabric shall hang flat without buckling or distortion. Replace units or components which cannot be adjusted to hang properly or operate smoothly.

DIVISION 16 — ELECTRICAL  
(Note: Refer to engineering drawings for complete electrical specifications.)

16050 \_BASIC MATERIALS

A.	Electrical receptacles shall be Decora by Leviton (800-323-8920). Color shall be black except for receptacles on dedicated circuits which shall be gray and isolated ground receptacles which shall be orange. Receptacle faceplates shall be stainless steel with a satin or brushed finish.
B.	Switches shall be Decora by Leviton (800-323-8920). Color shall be black. Switch faceplates shall be stainless steel with a satin or brushed finish.
C.	Dimmers shall be Decora by Leviton (800-323-8920) or visually match Decora style. Dimmers shall be compatible with light fixtures and ballasts. Color shall be black. Faceplates shall be stainless steel with a satin or brushed finish where possible - faceplates shall match dimmer at other locations.

